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Only relatively few approaches to immobilizing DNA, to date, have found their way into commercial products. One such product for immobilizing oligonucleotides onto microwell plates is known as NUCLEOLINK™, and is available from Nalge Nunc International (see, e.g., Nunc Tech Note Vol. 3, No. 17). In this product, the DNA is reacted with a carbodiimide to activate 5'-phosphate groups, which then react with functional groups on the surface. Disadvantages of this approach are that it requires the extra step of adding the carbodiimide reagent as well as a five hour reaction time for immobilization of DNA, and it is limited to a single type of substrate material.

Replace the first paragraph on page 3 with the following:

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As another example, Pierce has introduced a proprietary DNA immobilization product known as REACTI-BIND™ DNA Coating Solutions (see Instructions - REACTI-BIND™ DNA Coating Solution 1/1/1997). This product is a solution that is mixed with DNA and applied to surfaces such as polystyrene or polypropylene. After overnight incubation, the solution is removed, the surface washed with buffer and dried, after which it is ready for hybridization. Although the product literature describes it as being useful for all common plastic surfaces used in the laboratory, it does have some limitations. For example, Applicants were not able to demonstrate useful immobilization of DNA onto polypropylene using the manufacturer's instructions. Furthermore, this product requires large amounts of DNA. The instructions indicate that the DNA should be used at a concentration between 0.5 and 5 µg/ml.

In the claims:

Claim 10 is cancelled without prejudice or disclaimer.

- A⁴
- Sub A⁵
1. (Once Amended) A reagent composition for attaching a target molecule to the surface of a substrate, the reagent composition comprising a copolymer having one or more pendant epoxy groups, the copolymer formed by reacting a mixture comprising
 - (a) one or more monomers having pendant epoxy groups; and